

STATE OF SOUTH CAROLINA
BEFORE THE PUBLIC SERVICE COMMISSION

DOCKET NO. 2019-89-E

In the Matter of:)	
)	
)	COMMENTS OF SOUTH CAROLINA
Application of Duke Energy)	COASTAL CONSERVATION
Carolinas, LLC for Approval of)	LEAGUE AND SOUTHERN
Rider 11)	ALLIANCE FOR CLEAN ENERGY
)	

The South Carolina Coastal Conservation League (“CCL”) and Southern Alliance for Clean Energy (“SACE”) submit the following comments on Duke Energy Carolinas, LLC’s (“DEC” or “the Company”) Application for approval of its demand-side management (“DSM”) and energy-efficiency (“EE”) rider for 2020 (“Rider 11”).

INTRODUCTION

CCL and SACE continue to support DEC’s DSM/EE programs, which are achieving substantial savings and benefits for South Carolina customers. After providing a high-level review of the Company’s energy savings and projections, CCL and SACE reiterate the need to confront the high number of non-residential opt outs and increase and improve offerings that reach low-income customers. Finally, we conclude with an update on the progress of the Collaborative and recommend enhanced DSM/EE reporting protocols.

DEC’S ENERGY SAVINGS AND PROJECTIONS

- A. DEC delivered its highest-ever energy savings in 2018, for the first time achieving its annual savings target in the Merger Settlement.**

DEC delivered its 861.6 gigawatt-hours (“GWh”) of DSM/EE portfolio savings at the generator in 2018.¹ This level of savings corresponds to 1.05% of prior-year retail sales²—meeting the one-percent annual energy savings target that the Company agreed to in a settlement entered into in connection with the then-proposed merger of Duke Energy and Progress Energy (“Merger Settlement”).³ According to the Company’s calculations, it came close to achieving its seven-percent cumulative savings target from the Merger Settlement for years 2014 to 2018. In response to a data request, the Company provided a calculation of cumulative savings since 2014, reporting 4.6% savings over those five years.⁴ DEC remains the only in the Southeast to achieve this level of savings and we applaud its efforts, but recognize that there remains room for improvement.⁵

Unfortunately, DEC projects a decline in efficiency savings of about 167 GWh in 2020, a decline of 19.4%.⁶ If these projections are realized, the corresponding drop in GWh savings would be highly concerning. It is not clear, however, whether the projected reduction in savings for 2020 is a return to the previous tendency of understating future performance, or an indication that significant corrective action is needed in order to maintain or grow efficiency savings going forward.

¹ DEC Rider 11 Application, Year 2018 Ex. 2; DEC Response to CCL/SACE Data Request 2-5.

² DEC Response to CCL/SACE Data Request 2-1.

³ The Merger Settlement with CCL and SACE, as well as Environmental Defense Fund, calls for annual energy savings of at least 1% of prior-year retail sales beginning in 2015 and cumulative savings of at least 7% over the period from 2014 through 2018, and was approved by the Commission in Docket No. 2011-158-E.

⁴ DEC Response to CCL/SACE Data Request 2-2(b)

⁵ Arkansas utilities also are achieving this level of savings, but opinions differ as to whether Arkansas should be included among utilities in the Southeast region.

⁶ DEC Rider 11 Application, Year 2020 Ex. 2, p. 23 (projecting 695.4 GWh savings in 2020).

Nevertheless, DEC's portfolio of DSM/EE programs has a number of positive elements. The program portfolio remains very cost-effective, with benefits of the programs significantly exceeding costs, thereby demonstrating that DEC's customers are realizing real value from the Company's programs. As indicated by the Utility Cost Test ("UCT") score, the net benefits ratio grew considerably, going from 3.45 in 2017 to 3.98 in 2018. The total net present value ("NPV") of avoided cost in 2018 was \$633,175,954.⁷ The portfolio includes a wide range of efficiency measures and programs. One of DEC's largest programs, the Energy Efficiency Appliances and Devices program produced nearly \$48 million more in net benefits in 2018 compared to 2017.⁸ We applaud the savings from the residential appliances program, but remain concerned about the overreliance on lightning measures to achieve those savings.

B. DEC increased savings in its residential programs in 2018, but non-residential savings declined dramatically.

DEC increased savings from residential programs, but non-residential EE programs declined in 2018. Residential programs achieved 562 GWh of savings in 2018, while nonresidential programs achieved 300 GWh of savings. These results are summarized in Table 1, below, which also presents energy savings by program and for the total portfolio.

⁷ DEC Rider 11, Load Impacts and Estimated Revenue Requirements, 2018 Ex. 2.

⁸ See Table 1.

Table 1.DEC EE Program Energy Savings in 2017 and 2018⁹

Residential Programs	2017 Savings (GWh)	2018 Savings (GWh)	% Change
Energy-Efficiency Education Program for Schools	5.93	4.89	-17.58%
Energy-Efficient Appliances and Devices	137.96	195.32	41.58%
HVAC Energy Efficiency	6.95	6.73	-3.26%
Income-Qualified EE and Weatherization Assistance	5.34	5.21	-2.43%
Multi-Family Energy Efficiency	19.06	21.31	11.83%
Residential Energy Assessments	7.72	7.72	-0.05%
My Home Energy Report	311.37	320.61	2.97%
Residential Total	494.33	561.79	13.65%

Non-Residential Programs			
Smart Saver Customer Technical Assessments	15.79	0.08	-99.47%
Smart Saver – Custom Rebate	40.61	30.33	-25.31%
Smart Saver – Food Service Products	1.38	1.15	-16.80%
Smart Saver – HVAC	2.95	2.91	-1.57%
Smart Saver – Lighting	270.57	178.36	-34.08%
Energy-Efficient Pumps and Drives Products	4.81	2.67	-44.47%
Energy-Efficient ITEE	0.00	0.02	n/a
Smart Saver – Process Equipment	0.65	0.33	-49.14%
Smart Saver – Performance Incentive	0.01	3.27	26,338%
Small Business Energy Saver	90.30	76.70	-15.06%
Smart Energy in Offices	10.27	1.49	-85.51%
Business Energy Report	0.04	n/a	-100%
EnergyWise for Business	n/a	n/a	n/a
Non-Residential Total	440.34	299.81	-31.91%

PORTFOLIO TOTAL	934.68	861.60	-7.82%
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⁹ DEC Response to CCL/SACE Data Request 2-5.

C. DEC's 2018 savings continue to be driven by behavioral and lighting programs, which could compromise future savings growth.

DEC's residential energy savings in 2018 was again driven largely by the My Home Energy Report ("MyHER") behavioral program, which delivered roughly 57% of the Company's total residential energy savings and 37.2% of total savings in 2018.¹⁰ Savings from behavioral programs do not produce the same kinds of deep and long-lasting savings that can be achieved from more comprehensive retrofit programs. CCL and SACE appreciate the Company's report that it is using the MyHER program as an opportunity to attract customers to other EE and DSM programs that can achieve deeper and longer-lasting savings.¹¹ We also look forward to tracking the progress of the new MyHER reports targeted to those living in multifamily dwellings.¹²

The Energy Efficient Appliance and Devices Program, which focuses on residential lighting, remains one of the Company's strongest programs. In 2018, the program was responsible for 195 GWh of energy savings—more than 22% of the total portfolio savings.¹³ Beyond this program and MyHER, DEC's six remaining residential programs together only generated 45.9 GWh of additional savings, or 5% of the total portfolio savings, indicating that DEC's efficiency portfolio remains too reliant on behavioral and lighting programs.¹⁴ This overreliance could hamper the growth of energy savings in the future, particularly given the changes to federal lighting efficiency

¹⁰ DEC Response to CCL/SACE Data Request 2-5.

¹¹ DEC Rider 11 Application, DEC Executive Summary, Ex. 6, p. 45 (indicating that the MyHER "report recommends measure-specific offers, rebates or audit follow-ups from the Company's other programs").

¹² *Id.*, p. 46.

¹³ DEC Rider 11 Application, Load Impacts and Estimated Revenue Requirements, 2018 Ex. 2; DEC Response to CCL/SACE Data Request 2-5

¹⁴ *Id.*

standards as we discussed in comments last year. DEC's 2016 potential study found that under the enhanced scenario, the HVAC energy-efficiency program could deliver 34% of the Company's potential savings in 2021, and we encourage the Company to more aggressively pursue savings from HVAC replacements.¹⁵

Similarly, a handful of DEC's programs are delivering the vast majority of savings in the non-residential sector. Savings from DEC's non-residential portfolio decreased to 299.81 GWh in 2018.¹⁶ Many of the Smart Saver programs have stagnated or even declined. For example, the Smart Saver Lighting program, the largest Smart Saver program, achieved savings of 178.36 GWh in 2018, a 34% decline from the previous year.¹⁷ The Company should continue to look for additional ways to retain and attract participants from this energy-intensive customer class.

CCL and SACE encourage DEC to continue working to increase participation across all customer segments by improving cross-participation in programs and by implementing new residential and non-residential EE programs.

DSM/EE PROGRAM RECOMMENDATIONS

A. DEC should address the barrier to higher DSM/EE savings posed by non-residential opt-outs.

As in previous years, the rate of non-residential customers opting out of DEC's DSM/EE programs and rider continued to increase in 2018 and are projected to increase more in 2019. As shown in Table 2, below, the percentage of DEC's non-residential

¹⁵ Nexant, Inc., *Duke Energy South Carolina DSM Market Potential Study* (Dec. 19, 2016) ("Nexant Study") at 97. The study, along with a similar study for North Carolina, was provided to participants in DEC's Carolinas Energy Efficiency Collaborative. The HVAC EE program is referred to as SmartSaver in the report.

¹⁶ DEC Response to CCL/SACE Data Request 2-5.

¹⁷ Id.

customers who have chosen to opt out of the Company's DSM and EE programs and rider has increased. The Company reported that 62% of its non-residential sales in South Carolina were to customers that had opted out of DEC's DSM programs in 2018. Similarly, DEC reports that 70% of its non-residential South Carolina sales were to customers that had opted out of the Company's EE programs and rider.

Table 2. South Carolina DEC Non-Residential Customers Opting Out of the DSM/EE Rider¹⁸

Year	Total non-residential sales (MWh)	DSM opt-outs (MWh)	EE opt outs (MWh)	DSM opt-out %	EE opt-out %
2016	14,934,362	9,247,406	10,201,067	62%	68%
2017	14,886,464	9,247,406	10,327,559	62%	69%
2018	14,743,439,230	9,169,736,147	10,257,713,985	62%	70%
2019 (Forecasted)	15,075,847,251	9,171,114,347	10,292,065,354	61%	68%
2020 (Forecasted)	15,139,896,798	9,171,114,347	10,292,065,354	61%	68%

It is imperative that DEC adopt new strategies and programs to reverse the trend of increasing opt-outs and grow its non-residential energy savings. While we recognize that commercial and industrial customers who opt out also certify that they have implemented their own energy-efficiency or demand-side management measures, there is no requirement to report any resulting savings to the Company or the Commission, which inhibits DEC's and the Commission's ability to plan.

There remains an opportunity for DEC to focus on the still-significant percentage of industrial load that has not opted out and to work with those customers to strengthen its tailored offerings for those customers. Industrial programs yield very cost-effective

¹⁸ DEC Response to CCL/SACE Data Request 2-3.

energy savings: the levelized cost of saved energy is generally less than three cents per kilowatt-hour (and often less than two cents/kWh).¹⁹ Utility investments in DSM and EE that pass cost-effectiveness screening can offset the cost of more expensive supply-side investments, thereby reducing total utility revenue requirements. Such investments have the effect of lowering costs for all customers in the medium and long term, regardless of whether they directly participate in the efficiency programs.

CCL and SACE strongly support a renewed focus on this energy-intensive group of customers and stand ready to work with the Company in the Collaborative to help it achieve its energy-savings potential from the non-residential sector.

B. Improving and adding low-income EE programs would ease the energy burden on low-income customers while improving comfort, safety and health

SACE and CCL continue to stress the importance of providing energy and bill savings for DEC's low-income customers. More efforts should be targeted at these customers, who have the highest energy burdens (the highest percentage of income spent on residential energy bills), and consequently, the most need for cost-saving energy-efficiency programs. SACE and CCL appreciate the increased strides made over the last year and continued engagement on this question at the Collaborative.

Creating new low-income EE programs and expanding the current programs is critical to meeting DEC's EE goals. Unfortunately, the Income Qualified Energy Efficiency and Weatherization Assistance and Neighborhood Energy Saver programs declined in 2018, going in the wrong direction. As shown in the Company's presentation

¹⁹ SEE Action Network, Industrial Energy Efficiency and Combined Heat and Power Working Group, "[Saving Energy in Industrial Companies: Case Studies of Energy Efficiency Programs in Large U.S. Industrial Corporations and the Role of Ratepayer-Funded Support](#)," March 2017.

to the Collaborative on January 31 2019, only 3.1% of its limited income-qualified weatherization community outreach spending occurred in South Carolina.²⁰ We are very concerned about the limited reach of these critical services to low-income South Carolinians and will continue to work with the Company in the Collaborative to work on solutions to this problem.

South Carolinians experience high levels of poverty and correspondingly high customer energy burdens.²¹ Energy-efficiency programs for low-income households are key to addressing this issue. While Duke is to be commended for its low-income energy-efficiency achievements to date, more is needed going forward. The Collaborative has identified low-income energy efficiency as one of its top priorities for 2019. Discussion has centered on increasing total budgets and savings impact for low-income customers and refining approaches for designing and implementing programs to do so. Several broad strategies have been discussed that would increase the impact of efficiency programs for the benefit of low-income customers:

- **Expand budget allocations for programs targeted to low-income customers –**

To be effective, increased spending must be matched with well-designed programs, effective delivery channels, and evaluation approaches that properly inform and support periodic refinements to overcome challenges to serving this

²⁰ Excerpt from January 31, 2019 Duke Energy Collaborative Presentation (attached as SACE/CCL Exhibit 1 to these comments)

²¹ US Census Bureau, American Community Survey 5-year Estimates (2013-2017); *Allowable Ex Parte Briefing of Dr. John Ruoff regarding Impact of Proposed Rate Adjustments on Customers*, South Carolina Public Service Commission Docket No. 2018-319-E (Feb. 20, 2019), <https://dms.psc.sc.gov/Attachments/Matter/49d1e4e5-f20c-4819-973b-d6c441e7c562>

segment of customers. Without higher levels of spending, however, there is little hope of achieving substantially more than has been accomplished in the past.

- **Refine and expand existing program offerings** – Over the past year, Duke has shown a willingness to modify current program offerings to deliver more impact to low-income customers, like adding measures to the Neighborhood Energy Saver (NES) program,²² aiming to overcome bottlenecks in the delivery of its Income Qualified Energy Efficiency and Weatherization program, and potentially reallocating funds between the programs to reach more low-income customers. While Duke has initiated some discussions with the Collaborative on these subjects, more still needs to be done to meaningfully engage the group on changes to existing program offerings. For instance, we agree with Duke that there is a need for careful attention to the Income Qualified program, which has fallen short of budget and participation projections every year since its inception.

• **Deploy new programs** – Delivering effective low-income efficiency programs is a priority for utilities, Commissions, and stakeholders across the country. There are numerous examples of programs aimed at meeting the unique needs of low-income customers that could be adapted and implemented by DEC, such as programs for manufactured homes, multifamily housing, and on-bill financing. Each of these has been the subject of previous SACE and CCL comments.²³

²² While this program does not have income qualification eligibility requirements, the neighborhood selection process involves evaluation of US Census data to target communities with high levels of poverty.

²³ See, e.g., Comments of SACE and CCL, DEC Rider Docket 10, P.S.C. Docket No. 2018-72-E (Jun. 27, 2018).

- **Prioritize increasing low-income customer impact through non-income qualified programs** – At the January Collaborative meeting, Duke presented a chart²⁴ showing low-income impact tracking across its portfolio of residential programs. We strongly support this attention and look forward to working with Duke to use data such as this to inform strategies for capturing more impact for low-income customers in all residential programs going forward.

We are committed to supporting DEC in each of the above areas, while giving attention to achieving levels of cost effectiveness that are appropriate for serving low-income customers.

C. Building on Improvements to the DEC Collaborative

DEC has engaged with stakeholders on energy efficiency for over a decade. Stakeholder participation has been formalized in the form of “the Collaborative,” which covers both Duke Energy Progress’s and DEC’s EE/DSM programs across both North and South Carolina. The Collaborative invites non-governmental organizations and consumer advocates to provide meaningful feedback and advice on DEC’s energy-efficiency initiatives. The Commission-approved settlement that initiated this stakeholder process envisioned that the Collaborative would review modifications to DSM/EE programs, support public education about DSM/EE programs, review EM&V processes, give recommendations for the submission of applications to revise or extend programs and rate structures, and guide efforts to expand cost-effective programs.

²⁴ January 31, 2019 Duke Energy Collaborative Presentation (attached as SACE/CCL Exhibit 1 to these comments)

In the past, the Collaborative's impact on the development of new program ideas, program modifications, and overall savings from Duke's efficiency program portfolio were not as strong as it could be. However, as set forth below, there are some encouraging signs that this is improving.

Representatives from SACE and CCL have worked closely with Duke Energy over the past year to make a number of positive changes to the Collaborative, including: more frequent meetings, shared agenda setting, high levels of stakeholder involvement, group prioritization of the Collaborative's annual work priorities, increased communication, and more tangible project deliverables. DEC has provided substantial documentation to the Collaborative and participated actively in meetings. SACE and CCL appreciate DEC's commitments to the Collaborative and are encouraged by a number of improvements in the operation of these meetings since last fall. We also see room for improvement and offer suggestions below. Beginning in September 2018, SACE and CCL have worked closely with Duke to implement a number of positive changes that improve the likelihood of current and future work at the Collaborative showing concrete results than in the past.

These include:

- More frequent in-person meetings to achieve greater momentum on Collaborative priorities
- Shared agenda setting to identify pertinent topics, achieve greater stakeholder buy-in, and increase discussion among participants
- Higher levels of stakeholder involvement
- A shift in focus away from formulaic reporting by the Company towards a greater emphasis on problem-solving opportunities and the development of program enhancement recommendations

- Group decision-making on setting the Collaborative's annual work priorities
 - More communication and project work occurring between regular Collaborative meetings
 - New expectations around tangible project deliverables.
- It is encouraging that even with more frequently scheduled meetings, Stakeholder

participation in the Collaborative has been robust, and Duke Energy has provided significant investment by enlisting participation by a large number of their program management staff.

CCL and SACE ask the Commission to observe the work of the Collaborative this year to determine whether significant additional progress has been made, particularly with regards to tangible impact resulting from the Collaborative's work. Specifically, the current work tasks of the Collaborative involve:

- Portfolio-level assessment of opportunities and challenges
- Expansion of efficiency savings impact for low-income customers
- Modification and additions to DEC efficiency programs reflecting direct input from the work of the Collaborative

We respectfully request that in 2020, the Commission seek comment from Collaborative participants on whether the Collaborative has sufficiently corrected its course or indicate if changes are needed that would warrant Commission action.

As part of the portfolio-level assessment of opportunities and challenges, we suggest the Collaborative address the projected decline of annual savings from over one-percent down to 0.84% in annual savings DEC forecasts for 2020, such that there is a plan to maintain and grow current savings levels from what DEC achieved in 2017 and 2018.

D. Improving Data Reporting Protocols

Increasing transparency surrounding DEC's DSM/EE efforts and Recovery Rider would be beneficial for intervenors, Staff, the Commission, and the public. Establishing standard annual reporting protocols could help achieve these goals. While the majority of information needed for such reporting is already prepared by Duke to support its annual filings, much of the supporting information can only be acquired through data requests, which means only parties to the proceeding have access to them.

Currently, the DEC DSM/EE Recovery Rider Application is not organized in a way that is convenient for review and analysis, nor presented in a way that would allow the Commission or the public to efficiently identify topline trends and takeaways. For instance, the Merger Settlement set annual and cumulative savings targets, but DEC does not report on progress towards meeting the target in its Application filings.

As a point of comparison, SACE/CCL Exhibit 2 is the Excel workbook filed by Energy Arkansas. This document is provided alongside the narrative of its annual efficiency performance filing and makes a considerable amount of topline analysis available in an easy to use format. Key features of the reports are:

- Planned Versus Actuals - Side-by-side comparisons of projected and actual program budgets, demand saving, and energy savings
- Budget breakdowns - indicating expenditures on incentives / direct install costs compared to marketing, administration, and EM&V costs
- Cost / Benefit - TRC and Program Administrator Cost test results (also known as the Utility Cost Test), TRC Net Present Value
- Levelized cost of energy saved
- Annual % of savings compared to baseline year
- Historic comparisons on budgets and energy savings

The Lawrence Berkeley National Laboratory has also developed a set of standard annual reporting tools that can be used by adopted by individual jurisdictions.

We suggest initiating development of a standard annual reporting protocol akin to the one used in Arkansas and incorporating the tools developed by the Lawrence Berkeley National Laboratory.

CONCLUSION

In conclusion, CCL and SACE support DEC's request for approval of Rider 11, and request that the Commission monitor the progress of the Collaborative and recommend improved data reporting protocols.

Respectfully submitted this 22nd day of May, 2019.

/s/ Stinson W. Ferguson

Stinson W. Ferguson
SC Bar No. 1234567
Southern Environmental Law Center
463 King Street – Suite B
Charleston, SC 29403
Telephone: (843) 720-5270
Fax: (843) 414-7039
sferguson@selcsc.org

*Attorney for South Carolina Coastal Conservation
League and Southern Alliance for Clean Energy*

STATE OF SOUTH CAROLINA
BEFORE THE PUBLIC SERVICE COMMISSION
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In re: Application of Duke Energy
Carolinas, LLC for Approval of
Rider 11, Demand-Side Management
and Energy Efficiency for 2020

CERTIFICATE OF SERVICE

I certify that the following persons have been served with a copy of the *Comments of South Carolina Coastal Conservation League and Southern Alliance for Clean Energy* by electronic mail and/or U.S. First Class Mail at the addresses set forth below:

Andrew M. Bateman, Counsel
Office of Regulatory Staff
1401 Main Street, Suite 900
Columbia, SC 29201
abateman@ors.sc.gov

Rebecca J. Dulin, Counsel
Duke Energy Carolinas, LLC
1201 Main Street, Suite 1180
Columbia, SC 29201
Rebecca.dulin@duke-energy.com

Carrie Harris Grundmann, Counsel
Spilman Thomas & Battle, PLLC
110 Oakwood Drive, Suite 500
Winston-Salem, NC 27103
cgrundmann@spilmanlaw.com

Samuel J. Wellborn, Counsel
Robinson Gray Stepp & Laffitte, LLC
P.O. Box 11449
Columbia, SC 29211
swellborn@robinsongray.com

Derrick Price Williamson, Counsel
Spilman Thomas & Battle, PLLC
110 Bent Creek Blvd., Suite 101
Mechanicsburg, PA 17050
dwilliamson@spilmanlaw.com

Stephanie U. (Roberts) Eaton, Counsel
Spilman Thomas & Battle, PLLC
110 Oakwood Drive, Suite 500
Winston-Salem, NC 27103
sroberts@spilmanlaw.com

Jenny R. Pittman, Counsel
Office of Regulatory Staff
1401 Main Street, Suite 900
Columbia, SC 29201
jpittman@ors.sc.gov

This the 22nd day of May, 2019.

s/ A. Rachel Pruzin
Andrea Rachel Pruzin
Southern Environmental Law Center

SACE/CCL Exhibit 1

Duke Energy Carolinas Collaborative Meeting

January 31, 2019



Meeting Agenda

- Safety
- Regulatory and Program Update
- Purpose Statement
- 2019 Priorities and Commission Directives, Part 1—Background, Discussion, Brainstorming
- Low-Income EE Research and Discussion
- Lunch and Cost-effectiveness Report Update
- 2019 Priorities and Commission Directives, Part 2—Culling, Selection, Next Steps
- Program Modification Updates
 - Neighborhood Energy Savers
 - Residential Assessments
- Wrap Up

Neighborhood Energy Savers

Community Outreach Programs

Overview – Low Income Statistics



Low Income is defined as families with incomes
≤200% of the Federal Poverty Guidelines

Household Size	200% of Poverty
1	\$24,120
2	\$32,480
3	\$40,840
4	\$49,200
5	\$57,560
6	\$65,920

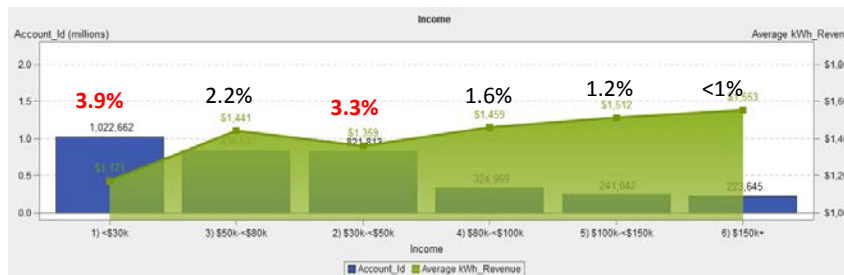
While 51% of all customers live in homes built
before 1960, 72% of Low Income customers live
in older inefficient homes

Housing Stock Demographics Built Before 1960		
Jurisdiction	Customer Accounts w/Homes Built Before 1960	Accounts <200% of Poverty
DEC(NC)	812,171	388,123
DEP(NC)	573,141	274,136
DEC(SC)	267,854	132,076
DEP(SC)	135,870	56,734
TOTAL	1,789,036	851,069
	51.5%	72.3%

On average, 33% of all of Duke Energy Customers are Low Income;
however DEP SC is significantly higher at 52%

Low Income Accounts by Jurisdiction			
Jurisdiction	Customer Accounts	Accounts <200% of Poverty	% Low Income by Jurisdiction
DEC(NC)	1,679,656	540,302	32.17%
DEP(NC)	1,169,392	376,778	32.22%
DEC(SC)	484,932	178,297	36.77%
DEP(SC)	135,870	71,756	52.81%
TOTAL	3,469,850	1,168,133	33.6%

The energy burden (% of % paid in energy bills to income) is higher
for low income customers



Neighborhood Energy Saver Program

Program Overview



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Program Design

- Operates in all jurisdictions
- Recruit customers in pre-selected neighborhoods to participate in energy efficiency program
- Provide customers with measures and education that reduce energy consumption
- Neighborhood kickoff event to disseminate program information to customers

Eligibility

- Pre-selected neighborhoods consisting of 50% or more households, at or below 200% of the FPG
- Neighborhoods are approximately 500-2000 households

Program Measures

- Whole house walk-through assessment
- LEDs starting 2017 (CFLs 2009-2017)
- Water Heater Wrap / Pipe Wrap / Temperature Check
- Water Saving Shower Head /Aerators
- Switch Plate Wall Thermometer
- HVAC Winter Kit for wall/window unit
- Foam Insulation Spray /Caulking
- Door Weather Stripping / Sweep
- AC/Heat Filters (Year Supply)
- Room A/C Cover
- Energy Saving Calendar



Program Education

- Leave Behind Brochure
- Energy efficiency education on consumption and reduction
- Maintenance of installed measures
- Resources available for other energy efficient products and services

Program Implementation

- Implementation Vendor - Honeywell since 2016
 - GoodCents was vendor in DEC 2013-2015
- 4 Crews
 - DEC NC – Charlotte & Greensboro
 - DEC SC - Greenville
 - DEP - Raleigh

Approach

- Identify the neighborhood
- Work with key community leaders
- Send out communication to eligible customers
- Hold a kick off event / information meeting
- Door to Door / Street by Street canvassing method
- Goal of 70% penetration within each neighborhood

Neighborhood Energy Saver Program

Program to Date Results / Enhancement Process



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Consumer Benefits

- Professionally installed energy efficiency measures at no cost to customer
- 10% QC to ensure work is performed

Customer Satisfaction

- High Customer Satisfaction >97%
- Survey postcard left behind with customer once measures installed

Overview of Production

Neighborhoods	Count	Total Eligible Households	Total PTD Production	% Production
DEP-NC	33	38,374	29,220	76.1%
DEP-SC	12	16,573	11,832	71.4%
Duke Energy NC	48	56,172	34,353	61.2%
Duke Energy SC	25	24,715	13,494	54.6%
Total	118	135,834	88,899	65.4%

Program to Date Production

Jurisdiction	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
DE Progress – NC	3,489	4,263	3,228	2,616	3,185	3,342	3,812	3,301	1,984	29,220
DE Progress – SC	1,336	794	1,304	1,777	915	471	600	1,572	3,063	11,832
Duke Energy NC				1,813	6,754	4,405	6,063	8,244	7,074	34,353
Duke Energy SC				1,103	2,328	1,990	2,442	2,840	2,791	13,494
Total	4,825	5,057	4,532	7,309	13,182	10,208	12,917	15,957	14,912	88,899
Annual MWH Savings	3,958	2,082	2,182	2,941	5,128	4,408	5,124	6,282	5,912	38,019

Program Enhancements

- Brainstorm possible enhancements to the program
- Receive input from the Collaborative
- Once feasible, Program submitted to the New Product Development team to take through the gate process
 - Request measure costs
 - Determine participation
 - Determine energy savings of new measures
 - Run DSM
- Program submitted to Management for approval
- If approved, Program filed to Utilities Commission for review and approval
- Finalize vendor contract with new measures
- Upon approval, implement new measures

Community Outreach Programs

Overview – Weatherization Overview



	DEC NC	DEC SC	DEP
Program Design	Tiered program	Tiered Program	Pay for Performance Incentives
Start Date	Feb 2015	Feb 2015	Pilot in Buncombe Cty only Jan 2019
Primary Agency Funding	<p>The programs are implemented using the local State Weatherization Agency, who follows DOE/LIHEAP rules. Agencies determine customer eligibility based on income, assess the home performing a NEAT (National Energy Audit Tool) analysis, and install measures based on cost-effectiveness from the NEAT Tool. Each state works on differing fiscal years, but the grant \$ provided from DOE/LIHEAP have strict requirements.</p> <ul style="list-style-type: none"> • Must be used only for the purpose intended (weatherization work) • Must stay within their average spend per home • Must be used within the fiscal year allocated (SC Apr 1 – Mar 30; NC July 1 – June 30) • A % (12-18%) can be used for health and safety • If annual contract spent/completions not met, will impact next year's allocation to the agency • Any incentives/rebates provided must go back into the grant and follow all of the above rules* 		
# of Agencies Participating	13 agencies – Coordinated through NCCAA	3 Eligible; only 1 participating (GLEAMNS)	Currently only 1 agency
Exceptions / Challenges	*NC books incentives as non-discretionary income – resulting in higher participation in the program	Very low participation in the program; booked as an “Applicable Credit” SC agencies have issues meeting DOE/LIHEAP goals and spending	No experience yet. Program just launched.
Annual Budget Goal vs. Actual	\$3.3M / \$2.3M actual / Avg spend	\$1M; / \$71K	\$50 K
PTD Participation	2,700 Participants	39 Participants	Just launched
MWH Savings	4,705 MWH Weatherization; 651 MWH for Refrigerator Replacement		

Community Outreach Programs

Overview – Weatherization Overview



2015-2018 Combined	2015		2016		2017		2018		Total	
DEC WX - Project Type	Projects	Total Paid	Projects	Total Paid	Projects	Total Paid	Projects	Total Paid	Projects	Total Paid
Refrigerator Replacement	41	\$ 28,465.50	133	\$ 92,977.50	145	\$ 96,736.50	170	\$ 135,245.50	489	\$ 353,425.00
Weatherization Tier 1	81	\$ 39,299.10	80	\$ 36,564.97	48	\$ 23,743.31	73	\$ 34,655.86	282	\$ 134,263.24
Weatherization Tier 2	318	\$ 737,993.88	604	\$ 1,388,517.58	385	\$ 923,784.21	370	\$ 942,775.96	1677	\$ 3,993,071.63
HVAC Replacement	2	\$ 382.20	16	\$ 79,624.49	58	\$ 316,613.24	215	\$ 1,188,836.44	291	\$ 1,585,456.37
Total	442	\$ 806,140.68	833	\$ 1,597,684.54	636	\$ 1,360,877.26	828	\$ 2,301,513.76	2739	\$ 6,066,216.24
North Carolina	2015		2016		2017		2018		Total	
DEC WX - Project Type	Projects	Total Paid	Projects	Total Paid	Projects	Total Paid	Projects	Total Paid	Projects	Total Paid
Refrigerator Replacement	41	\$ 28,465.50	133	\$ 92,977.50	145	\$ 96,736.50	168	\$ 133,502.25	487	\$ 351,681.75
Weatherization Tier 1	81	\$ 39,299.10	80	\$ 36,564.97	48	\$ 23,743.31	70	\$ 34,403.01	279	\$ 134,010.39
Weatherization Tier 2	318	\$ 737,993.88	594	\$ 1,368,482.85	385	\$ 923,784.21	346	\$ 872,829.73	1643	\$ 3,903,090.67
HVAC Replacement	2	\$ 382.20	16	\$ 79,624.49	58	\$ 316,613.24	215	\$ 1,188,836.44	291	\$ 1,585,456.37
Total	442	\$ 806,140.68	823	\$ 1,577,649.81	636	\$ 1,360,877.26	799	\$ 2,229,571.43	2700	\$ 5,974,239.18
South Carolina	2015		2016		2017		2018		Total	
DEC WX - Project Type	Projects	Total Paid	Projects	Total Paid	Projects	Total Paid	Projects	Total Paid	Projects	Total Paid
Refrigerator Replacement	0	\$ -	0	\$ -	0	\$ -	2	\$ 1,743.25	2	\$ 1,743.25
Weatherization Tier 1	0	\$ -	0	\$ -	0	\$ -	3	\$ 252.85	3	\$ 252.85
Weatherization Tier 2	0	\$ -	10	\$ 20,034.73	0	\$ -	24	\$ 69,946.23	34	\$ 89,980.96
HVAC Replacement	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -
Total	0	\$ -	10	\$ 20,034.73	0	\$ -	29	\$ 71,942.33	39	\$ 91,977.06

Year	Families Received DEC NC WX Services	Paid DEC NC WX Projects	Families Received DEC NC WX and HHF	% DEC NC WX & HHF
2015	403	442	287	71%
2016	724	833	586	79%
2017	559	636	343	61%
2018	659	799	459	69%

	NC Avg/Project	SC Avg/Project
Refrigerator Replacement	\$ 722.14	\$ 871.63
Weatherization Tier 1	\$ 480.32	\$ 84.28
Weatherization Tier 2	\$ 2,375.59	\$ 2,646.50
HVAC Replacement	\$ 5,448.30	
Total	\$ 2,212.68	\$ 2,358.39

Community Outreach Programs

Overview – Helping Home Fund



\$20M – DEP/DEC Rate Case 2015-2017

DEP/DEC Rate Case 2014 – Program Guidelines

- \$3,000 for health and safety repairs
- \$2,000 for appliances - refrigerator, washer/dryer, room A/C unit
- \$3,000 for Weatherization – DEP only
- **\$10K for HVAC installations and/or tune up**

Type	DEC	DEP	Totals	# Projects	% Spend
Appliance Replacement	\$987,251.05	\$645,828.82	\$1,633,079.87	1674	8.2%
Health & Safety	\$1,712,135.69	\$847,904.92	\$2,560,040.61	2727	12.9%
HVAC Replacement	\$6,308,594.66	\$6,291,153.33	\$12,599,747.99	1876	63.3%
Weatherization Tier 1		\$97,174.37	\$97,174.37	322	0.5%
Weatherization Tier 2		\$990,132.69	\$990,132.69	488	5.0%
QA/QC	\$19,304.83	\$15,952.13	\$35,256.96		0.2%
Admin fees	\$1,000,000.00	\$1,000,000.00	\$2,000,000.00		10.0%
Totals	\$10,027,286.23	\$9,888,146.26	\$19,915,432.49	7087	100%

Piedmont Merger - Program Guidelines

- \$3,000 for health and safety repairs
- \$2,000 for appliances - refrigerator, washer/dryer, room A/C unit
- **\$800 for HVAC repairs and/or tune up**

\$2.5M – Piedmont Merger 2017

Type	DEC	DEP	Totals	Projects	% Spend
Appliance Replacement	\$ 318,410.12	\$ 225,138.81	\$ 543,548.93	397	24%
Health & Safety	\$ 980,578.51	\$ 388,947.36	\$ 1,369,525.87	1067	62%
HVAC Repair	\$ 124,443.18	\$ 98,022.37	\$ 222,465.55	376	10%
Admin fees	\$ 44,944.05	\$ 44,944.05	\$ 89,888.09		4.0%
Totals	\$ 1,468,375.85	\$ 757,052.58	\$ 2,225,428.43	1840	100%

DEP Rate Case 2017 - Program Guidelines

- \$3,000 for health and safety repairs
- \$2,000 for appliances - refrigerator, washer/dryer, room A/C unit
- **\$1,000 for HVAC repairs and/or tune up**
- **\$4,000 towards cost of new HVAC system/duct work**

Type	DEP	Projects	% Spend
Appliance Replacement	\$ 20,542.84	14	40%
Health & Safety	\$ 23,116.07	17	45%
HVAC Repair	\$ 5,534.18	11	11%
Admin fees	\$ 1,954.03		4%
Totals	\$ 51,147.12	42	100%

Note: 34 projects are represented in the 42 paid 2017 rate case projects

Community Outreach Programs

Overview – Customer Assistance Funds



Customer Assistance Funds	2018	2018		2017	2017
ENERGY NEIGHBOR FUND	Customer Contributions	Company Contribution		Customer Contributions	Company Contribution
NORTH CAROLINA	\$ 266,000.00	\$ 306,000.00		\$ 273,000.00	\$ 313,000.00
SOUTH CAROLINA	\$ 26,000.00	\$ 26,000.00		\$ 28,000.00	\$ 28,000.00
FLORIDA	\$ 194,000.00	\$ 252,000.00		\$ 209,000.00	\$ 269,000.00
TOTAL	\$ 486,000.00	\$ 584,000.00		\$ 510,000.00	\$ 610,000.00
SHARE THE WARMTH - CAROLINAS	Customer Contributions	Company Contribution		Customer Contributions	Company Contribution
NORTH CAROLINA*	\$ 350,000.00	\$ 577,500.00		\$ 344,250.00	\$ 576,750.00
SOUTH CAROLINA**	\$ 115,000.00	\$ 197,500.00		\$ 114,750.00	\$ 197,250.00
TOTAL	\$ 465,000.00	\$ 775,000.00		\$ 459,000.00	\$ 774,000.00
HEATSHARE – OHIO	Customer Contributions	Company Contribution		Customer Contributions	Company Contribution
	\$ 111,000.00	\$ 200,000.00		\$ 110,000.00	\$ 200,000.00
HELPING HAND - INDIANA	Customer Contributions	Company Contribution		Customer Contributions	Company Contribution
	\$ 112,000.00	\$ 500,000.00		\$ 118,000.00	\$ 700,000.00
WINTERCARE - KENTUCKY	Customer Contributions	Company Contribution		Customer Contributions	Company Contribution
	\$ 26,000.00	\$ 50,000.00		\$ 27,000.00	\$ 50,000.00
SUBTOTAL Customer Assistance Funds	\$ 1,200,000.00	\$ 2,109,000.00		\$ 1,224,000.00	\$ 2,334,000.00
DEC NC Rate Settlement \$ distributed to STW agencies in 2018*		\$ 4,000,000.00			
DEC SC Merger Settlement \$ distributed to STW agencies in 2018**		\$ 600,000.00			
	Total Company Contributions	\$ 6,709,000.00			\$ 2,334,000.00

Community Outreach Programs

Overview – Program Participation

Program Participation	Customers <\$50,000						Customers < \$30,000					
Low Income Targeted Program	All Customers	LI Customers	% Low Income*	DEC Customers	DEC LI Customers	% Low Income	All Customers	LI Customers	% Low Income*	DEC Customers	DEC LI Customers	% Low Income
Neighborhood Energy Saver	80,631	65,028	80.6%	25,934	20,465	78.9%	80,631	43,049	53.4%	25,934	13,996	54.0%
	Programs with Customer Investment						Programs with Customer Investment					
Smart Saver	147,239	31,767	21.6%	75,087	17,613	23.5%	147,239	11,213	7.6%	75,087	6,404	8.5%
Online Lighting Store	167,299	45,937	27.5%	102,356	29,682	29.0%	167,299	17,309	10.3%	102,356	11,515	11.2%
Home Energy Imp	135,133	40,063	29.6%				135,133	6,360	4.7%			
	449,671	117,767	26.2%	177,443	47,295	26.7%	449,671	34,882	7.8%	177,443	17,919	10.1%
	Rebates to Customer						Rebates to Customer					
Appliance Recycle	64,193	25,066	39.0%	20,614	8,508	41.3%	64,193	11,858	18.5%	20,614	3,968	19.2%
Power Manager	898,574	369,823	41.2%	215,547	82,105	38.1%	898,574	177,393	19.7%	215,547	37,129	17.2%
	962,767	394,889	41.0%	236,161	90,613	38.4%	962,767	189,251	19.7%	236,161	41,097	17.4%
	Free Programs to Customer						Free Programs to Customer					
Home Energy House Call	254,096	88,917	35.0%	54,079	18,101	33.5%	254,096	37,194	14.6%	54,079	7,696	14.2%
K-12 Education	201,857	83,995	41.6%	114,632	50,738	44.3%	201,857	40,014	19.8%	114,632	24,602	21.5%
MyHER	2,746,125	1,182,166	43.0%	1,330,875	604,097	45.4%	2,746,125	595,658	21.7%	1,330,875	310,200	23.3%
Residential Lighting	1,928,721	838,810	43.5%	1,216,878	567,107	46.6%	1,928,721	412,785	21.4%	1,216,878	290,793	23.9%
Multi-Family EE	78,209	48,236	61.7%	44,173	27,938	63.2%	78,209	32,688	41.8%	44,173	19,031	43.1%
	4,954,912	2,153,207	43.5%	1,261,051	595,045	47.2%	4,954,912	1,081,145	21.8%	1,261,051	309,824	24.6%
*From REZ tool, based in incomes <\$50K and <\$30K - 2017												



Arkansas Public Service Commission

Standardized Annual Reporting Workbook v4.0 August 2017

General	Energy Efficiency Portfolio Data and Information		
Instructions Glossary	2017 EE Portfolio Information	2017 Program Year Evaluation	Historical Information
Entergy Arkansas, Inc.			

Annual Report Tables					Reports			Data	
EE Portfolio Summary	EE Portfolio Expenditures by Program	EE Portfolio Expenditure Summary by Cost Type	Company Statistics	Program Budget, Energy Savings & Participants	Portfolio Results Detail by Program	Portfolio Results Detail by Sector	Best Practices	Program Year Data	Next Annual Report Load Data
View	View	View	View	View	View	View	View	View	View

[Main Menu](#)**Table 1**[Next >>](#)**2017 Portfolio Summary**

Net Energy Savings		Costs			Cost-Effectiveness			Goal Achievement		
Demand MW	Energy MWh	Actual Expenditures	LCFC	Performance Incentives	TRC Net Benefits (NPV)	TRC Ratio	PAC Ratio	Commission Established Target % of Baseline	Actual Savings Achieved % of Baseline	% of Target Achieved (%)
104	264,992	\$ 57,141,646	\$ -	\$ 4,962,781	\$ 111,287,286	2.52	2.79	0.90%	1.49%	165%

Work Book is Incomplete
- Click Here For Details-

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Table 2

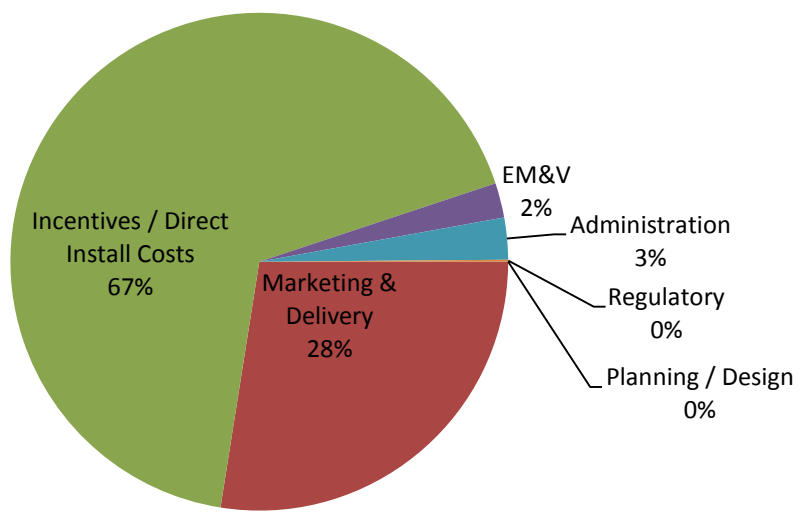
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EE Portfolio Expenditures by Program

Program Name	Target Sector	Program Type	2017		% of Budget
			Budget (\$)	Actual (\$)	
Bring Own T-stat Pilot	Residential	Demand Response	130,676	68,912	53%
Efficient Cooling Solutions	Residential	Measure/Technology Focus	2,608,580	2,209,519	85%
Energy Solutions for Manufactured Homes	Residential	Market Specific/Hard to Reach	1,066,973	1,013,729	95%
Energy Solutions for Multi-Family	Residential	Market Specific/Hard to Reach	1,087,309	964,280	89%
Home Energy Solutions	Residential	Whole Home	11,798,620	11,736,577	99%
Lighting & Appliances	Residential	Consumer Product Rebate	4,708,434	4,521,562	96%
Residential Benchmarking Program	Residential	Behavior/Education	557,798	468,626	84%
Residential Direct Load Control	Residential	Demand Response	3,044,555	2,064,063	68%
Small Business	Small Business	Market Specific/Hard to Reach	4,184,886	4,269,781	102%
C&I Solutions Program	Commercial & Industrial	Custom	23,644,196	21,195,549	90%
City Smart	Commercial & Industrial	Market Specific/Hard to Reach	3,664,805	3,638,872	99%
Commercial Midstream	Commercial & Industrial	Consumer Product Rebate	1,228,253	1,116,444	91%
Agricultural Energy Solutions	Agriculture	Prescriptive/Standard Offer	1,018,569	765,606	75%
Agricultural Irrigation Load Control	Agriculture	Demand Response	3,092,606	2,837,698	92%
Energy Efficiency Arkansas	Residential	Other	198,507	197,986	100%
Regulatory	-	-	-	72,440	-
Total			62,034,767	57,141,646	92%

EE Portfolio Expenditure Summary by Cost Type

Cost Type	2017 Total Expenditures			
	% of Total	Budget (\$)	Actual (\$)	% of Total
Planning / Design	0%	170,174	9,672	0%
Marketing & Delivery	27%	16,806,585	15,701,465	27%
Incentives / Direct Install Costs	65%	40,172,674	38,517,076	67%
EM&V	3%	2,073,388	1,285,628	2%
Administration	5%	2,811,946	1,555,365	3%
Regulatory	0%	-	72,440	0%
	100%	62,034,767	57,141,646	100%



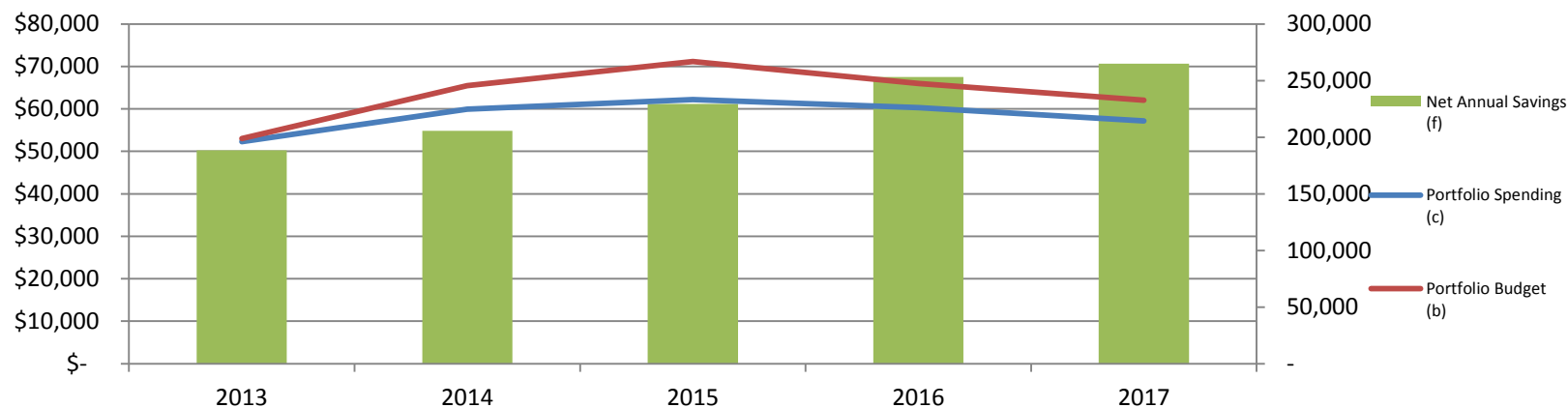
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Company Statistics

Program Year	Revenue and Expenditures					Energy				
	Total Revenue (a) (\$000's)	Budget		Actual		Total Annual Energy Sales (d) (MWh)	Plan		Evaluated	
		Portfolio Budget (b) (\$000's)	% of Revenue (%=b/a)	Portfolio Spending (c) (\$000's)	% of Revenue (%=c/a)		Net Annual Savings (e) (MWh)	% of Energy Sales (%=e/d)	Net Annual Savings (f) (MWh)	% of Energy Sales (%=f/d)
2013	\$ 1,678,683	\$ 53,032	3.2%	\$ 52,285	3.1%	20,859,130	165,469	0.79%	188,468	0.90%
2014	\$ 1,642,896	\$ 65,454	4.0%	\$ 59,914	3.6%	21,001,325	197,564	0.94%	205,507	0.98%
2015	\$ 1,820,805	\$ 71,178	3.9%	\$ 62,190	3.4%	21,160,228	186,555	0.88%	229,268	1.08%
2016	\$ 1,733,733	\$ 65,964	3.8%	\$ 60,270	3.5%	20,639,386	194,165	0.94%	253,201	1.23%
2017	\$ 1,739,545	\$ 62,035	3.6%	\$ 57,142	3.3%	20,888,455	238,130	1.14%	264,992	1.27%



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Table 5

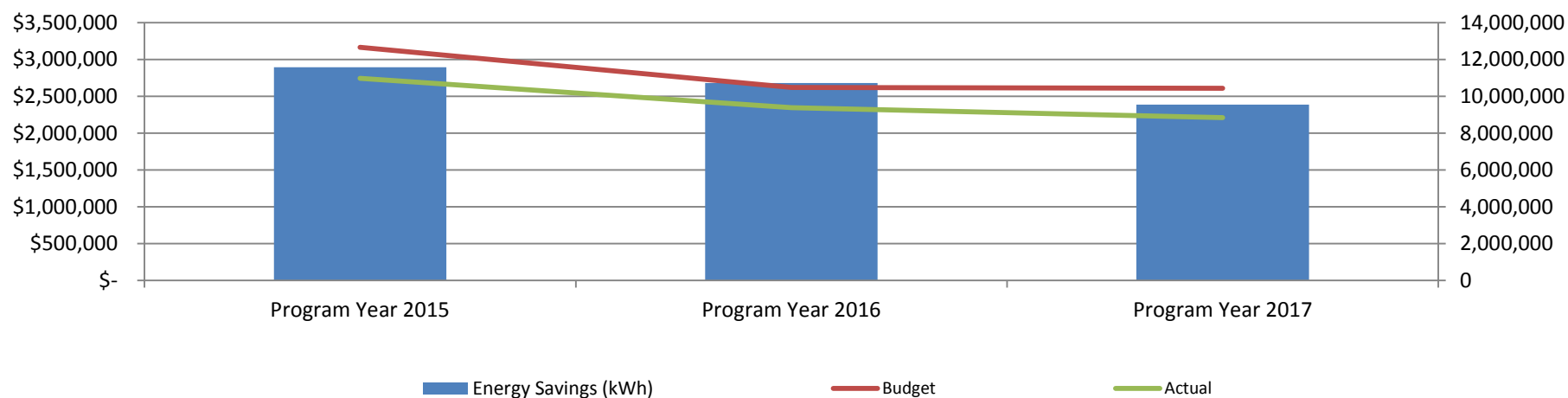
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Efficient Cooling Solutions

Select program from dropdown menu to view details.

Efficient Cooling Solutions

	Expenditures			Energy Savings (kWh)			Demand Savings (kW)			Participants		
Program	Budget	Actual	%	Plan	Evaluated	%	Plan	Evaluated	%	Plan	Actual	%
Program Year 2015	\$ 3,165,940	\$ 2,745,610	87%	9,100,000	11,572,605	127%	4,105	4,789	117%	10,061	7,478	74%
Program Year 2016	\$ 2,620,953	\$ 2,344,395	89%	16,141,000	10,724,845	66%	8,600	3,348	39%	10,061	4,324	43%
Program Year 2017	\$ 2,608,580	\$ 2,209,519	85%	17,446,000	9,548,026	55%	10,228	2,908	28%	5,999	2,548	42%



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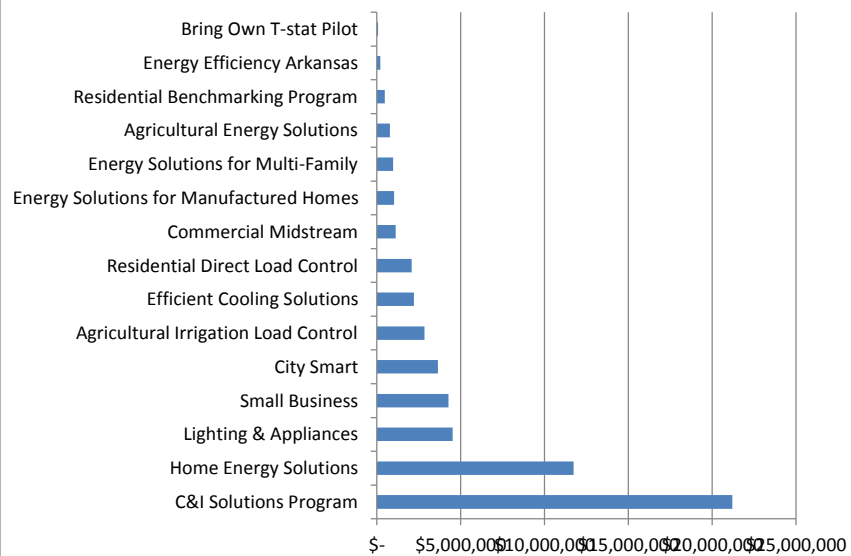
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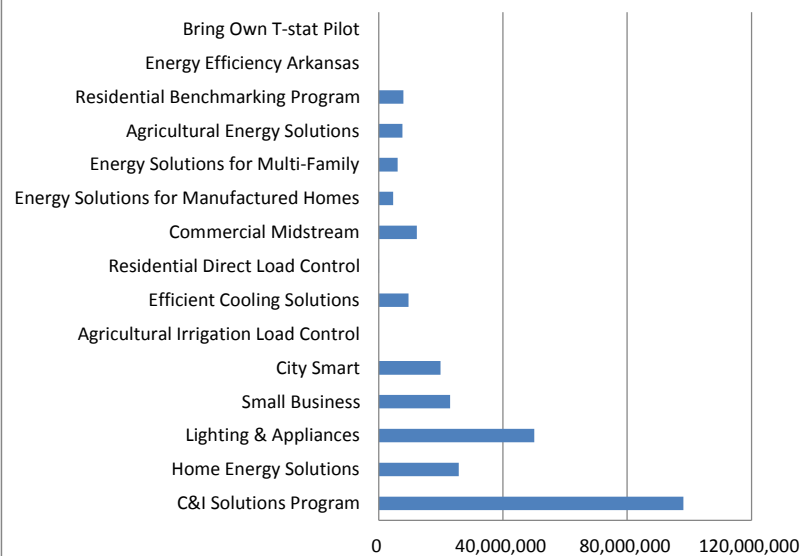
2017 Portfolio Results Detail

Program Name	Target Sector	Costs			Savings (kWh)			Participants			TRC Ratio
		Budget	Actual	%	Plan	Evaluated	%	Plan	Actual	%	
Bring Own T-stat Pilot	Residential	\$ 130,676	\$ 68,912	53%	0	0	-	750	55	7%	0.00
Efficient Cooling Solutions	Residential	\$ 2,608,580	\$ 2,209,519	85%	17,446,000	9,548,026	55%	5,999	2,548	42%	1.96
Energy Solutions for Manufactured Homes	Residential	\$ 1,066,973	\$ 1,013,729	95%	1,996,069	4,690,095	235%	900	641	71%	8.56
Energy Solutions for Multi-Family	Residential	\$ 1,087,309	\$ 964,280	89%	3,011,306	6,111,955	203%	4,000	1,898	47%	9.82
Home Energy Solutions	Residential	\$ 11,798,620	\$ 11,736,577	99%	22,638,739	25,757,464	114%	7,222	7,733	107%	2.82
Lighting & Appliances	Residential	\$ 4,708,434	\$ 4,521,562	96%	29,927,961	50,040,143	167%	2,261,358	291,634	13%	7.13
Residential Benchmarking Program	Residential	\$ 557,798	\$ 468,626	84%	9,118,435	7,901,231	87%	208,264	336,309	161%	0.87
Residential Direct Load Control	Residential	\$ 3,044,555	\$ 2,064,063	68%	0	1,734	-	22,184	23,075	104%	3.16
Small Business	Small Business	\$ 4,184,886	\$ 4,269,781	102%	13,247,024	23,005,941	174%	1,100	744	68%	1.92
C&I Solutions Program	Commercial & Industrial	\$ 23,644,196	\$ 21,195,549	90%	109,920,001	98,073,142	89%	850	764	90%	1.76
City Smart	Commercial & Industrial	\$ 3,664,805	\$ 3,638,872	99%	12,806,791	19,940,702	156%	85	367	432%	1.54
Commercial Midstream	Commercial & Industrial	\$ 1,228,253	\$ 1,116,444	91%	11,466,158	12,312,436	107%	849	912	107%	3.77
Agricultural Energy Solutions	Agriculture	\$ 1,018,569	\$ 765,606	75%	6,551,697	7,609,051	116%	118	51	43%	4.42
Agricultural Irrigation Load Control	Agriculture	\$ 3,092,606	\$ 2,837,698	92%	0	0	-	1,271	1,035	81%	1.43
Energy Efficiency Arkansas	Residential	\$ 198,507	\$ 197,986	100%	0	0	-	0	0	-	0.00
Regulatory		\$ -	\$ 72,440								
TOTAL:		\$ 62,034,767	\$ 57,141,646	92%	238,130,182	264,991,920	111%	2,514,950	667,766	27%	2.52

Costs



Savings (kWh)



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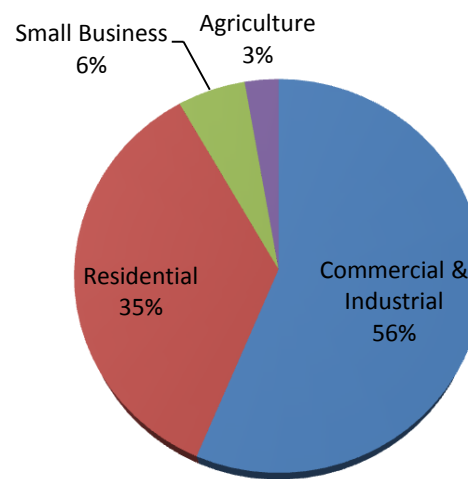
2017 Portfolio Results Detail by Target Sector

Target Sector	Costs			Savings (kWh)			Participants			TRC Ratio
	Budget	Actual	%	Plan	Evaluated	%	Plan	Actual	%	
Residential	\$ 25,201,452	\$ 23,245,255	92%	84,138,511	104,050,648	124%	2,510,677	663,893	26%	4.03
Small Business	\$ 4,184,886	\$ 4,269,781	102%	13,247,024	23,005,941	174%	1,100	744	68%	1.92
Commercial & Industrial	\$ 28,537,253	\$ 25,950,865	91%	134,192,950	130,326,280	97%	1,784	2,043	115%	1.84
Municipalities/Schools	\$ -	\$ -	-	0	0	-	0	0	-	n/a
Agriculture	\$ 4,111,175	\$ 3,603,305	88%	6,551,697	7,609,051	116%	1,389	1,086	78%	1.96
Other	\$ -	\$ -	-	0	0	-	0	0	-	n/a
Res/Small Business	\$ -	\$ -	-	0	0	-	0	0	-	n/a
Res/C&I	\$ -	\$ -	-	0	0	-	0	0	-	n/a
Small Business/C&I	\$ -	\$ -	-	0	0	-	0	0	-	n/a
All Classes	\$ -	\$ -	-	0	0	-	0	0	-	n/a
	-	-	-	-	-	-	-	-	-	-
TOTAL	\$ 62,034,767	\$ 57,069,206	92%	238,130,182	264,991,920	111%	2,514,950	667,766	27%	2.52

Select the Data to be Displayed in Chart

Savings (kWh)

Savings (kWh)



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Report 3

Level of Adoption of NAPEE "Best Practic

Item #	1a.		1b.	1c.	EE Total Portfolio Expenditures (A) (\$000's)	2a.	
Program Year	FTEs	FTEs / \$1M of EE Spending	Training Sessions Attended	Training Sessions Man-Hours		Planning & Design (B) (\$000's)	As % of Total Portfolio Expenditures (%=B/A)
2017	70	1.2	175	12,704	\$ 57,142	\$ 10	0.0%

Index to Docket No. 10-010-U Issue #8 Items	
Item #	Description
1	Program Staffing and Training Requirements
2	DSM Program Design & Implementation
3	DSM Program Evaluation
4	Estimation of DSM Resource Potential
5	Shareholder Incentives for Program Performance
6	Resource Planning with Energy Efficiency
7	Utility Best Practices Guidance for Providing Business Customers with Energy Use Cost Dat
8	Customer Incentives for Energy Efficiency Through Electric and Natural Gas Rate Design

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es" (Issue #8)

2b.		3a.	
Implementa- tion (C) (C=A-B-D) (\$000's)	As % of Total Portfolio Expenditures (%=C/A)	EM&V (D) (\$000's)	As % of Total Portfolio Expenditures (%=D/A)
\$ 55,846	97.7%	\$ 1,286	2.2%

	Where Available?
	Above
	Above
	Above
	Narrative Section 1.0
	Incentives Section
	Narrative Section 1.0
a	Narrative Section 3.3
	Narrative Section 3.3

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Program Name	Target Sector	Program Type	Delivery Channel
Lighting & Appliances	Residential	Consumer Product Rebate	Retail Outlets
Home Energy Solutions	Residential	Whole Home	Implementing Contractor
Efficient Cooling Solutions	Residential	Measure/Technology Focus	Implementing Contractor
Energy Solutions for Multi-Family	Residential	Market Specific/Hard to Reach	Direct Install
Energy Solutions for Manufactured Homes	Residential	Market Specific/Hard to Reach	Direct Install
Residential Benchmarking Program	Residential	Behavior/Education	Implementing Contractor
Residential Direct Load Control	Residential	Demand Response	Implementing Contractor
Energy Efficiency Arkansas	Residential	Other	Statewide Administrator
Commercial Midstream	Commercial & Industrial	Consumer Product Rebate	Retail Outlets
C&I Solutions Program	Commercial & Industrial	Custom	Trade Ally
Small Business	Small Business	Market Specific/Hard to Reach	Trade Ally
City Smart	Commercial & Industrial	Market Specific/Hard to Reach	Trade Ally
Agricultural Energy Solutions	Agriculture	Prescriptive/Standard Offer	Implementing Contractor
Agricultural Irrigation Load Control	Agriculture	Demand Response	Utility Outreach (email/direct mail)
Bring Own T-stat Pilot	Residential	Demand Response	Trade Ally
Empty			
Empty			
Empty			
Empty			
Empty			

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Program Year Data

2017 Portfolio Data

Program Name	Expenses		Energy Savings (kWh)		Demand Savings (kW)		Participants	
	Budget	Actual	Plan	Evaluated	Plan	Evaluated	Plan	Actual
Lighting & Appliances	\$ 4,708,434	\$ 4,521,562	29,927,961	50,040,143	6,533	9,908	2,261,358	291,634
Home Energy Solutions	\$ 11,798,620	\$ 11,736,577	22,638,739	25,757,464	10,440	10,122	7,222	7,733
Efficient Cooling Solutions	\$ 2,608,580	\$ 2,209,519	17,446,000	9,548,026	10,228	2,908	5,999	2,548
Energy Solutions for Multi-Family	\$ 1,087,309	\$ 964,280	3,011,306	6,111,955	1,716	2,526	4,000	1,898
Energy Solutions for Manufactured Homes	\$ 1,066,973	\$ 1,013,729	1,996,069	4,690,095	393	1,083	900	641
Residential Benchmarking Program	\$ 557,798	\$ 468,626	9,118,435	7,901,231	6,718	5,351	208,264	336,309
Residential Direct Load Control	\$ 3,044,555	\$ 2,064,063	0	1,734	35,000	37,612	22,184	23,075
Energy Efficiency Arkansas	\$ 198,507	\$ 197,986	0	0	0	0	0	0
Commercial Midstream	\$ 1,228,253	\$ 1,116,444	11,466,158	12,312,436	1,654	3,452	849	912
C&I Solutions Program	\$ 23,644,196	\$ 21,195,549	109,920,001	98,073,142	17,364	12,174	850	764
Small Business	\$ 4,184,886	\$ 4,269,781	13,247,024	23,005,941	2,841	2,817	1,100	744
City Smart	\$ 3,664,805	\$ 3,638,872	12,806,791	19,940,702	2,598	3,203	85	367
Agricultural Energy Solutions	\$ 1,018,569	\$ 765,606	6,551,697	7,609,051	937	1,040	118	51
Agricultural Irrigation Load Control	\$ 3,092,606	\$ 2,837,698	0	0	31,000	12,216	1,271	1,035
Bring Own T-stat Pilot	\$ 130,676	\$ 68,912	0	0	580	0	750	55
Empty	\$ -	\$ -	0	0	0	0	0	0
Empty	\$ -	\$ -	0	0	0	0	0	0
Empty	\$ -	\$ -	0	0	0	0	0	0
Empty	\$ -	\$ -	0	0	0	0	0	0
Empty	\$ -	\$ -	0	0	0	0	0	0

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Program Name	TRC					
	Lifetime Savings (MWh)	Total Cost	Total Benefits	Net Benefits	Ratio	Levelized cost
Lighting & Appliances	718,052	\$ 5,767	\$ 41,147	\$ 35,379	7.1	\$ 0.0122
Home Energy Solutions	421,459	\$ 11,737	\$ 33,081	\$ 21,344	2.8	\$ 0.0444
Efficient Cooling Solutions	88,580	\$ 2,217	\$ 4,346	\$ 2,128	2.0	\$ 0.0333
Energy Solutions for Multi-Family	74,760	\$ 400	\$ 3,930	\$ 3,530	9.8	\$ 0.0077
Energy Solutions for Manufactured Homes	74,732	\$ 393	\$ 3,364	\$ 2,971	8.6	\$ 0.0083
Residential Benchmarking Program	7,901	\$ 324	\$ 282	\$ (42)	0.9	\$ 0.0435
Residential Direct Load Control	2	\$ 1,368	\$ 4,324	\$ 2,957	3.2	\$ 835.9977
Energy Efficiency Arkansas	0	\$ 198	\$ -	\$ (198)	0.0	n/a
Commercial Midstream	184,687	\$ 2,401	\$ 9,045	\$ 6,644	3.8	\$ 0.0201
C&I Solutions Program	1,351,232	\$ 30,898	\$ 54,386	\$ 23,487	1.8	\$ 0.0342
Small Business	338,417	\$ 6,765	\$ 13,010	\$ 6,245	1.9	\$ 0.0306
City Smart	278,562	\$ 7,149	\$ 10,992	\$ 3,843	1.5	\$ 0.0386
Agricultural Energy Solutions	76,872	\$ 577	\$ 2,551	\$ 1,975	4.4	\$ 0.0102
Agricultural Irrigation Load Control	0	\$ 2,688	\$ 3,853	\$ 1,166	1.4	n/a
Bring Own T-stat Pilot	0	\$ 69	\$ -	\$ (69)	0.0	n/a
Empty	0	\$ -	\$ -	\$ -	n/a	n/a
Empty	0	\$ -	\$ -	\$ -	n/a	n/a
Empty	0	\$ -	\$ -	\$ -	n/a	n/a
Empty	0	\$ -	\$ -	\$ -	n/a	n/a
Empty	0	\$ -	\$ -	\$ -	n/a	n/a

Program Name	Target Sector	Annual Budget & Actual Cost				Annual
		2016		2017		2018
		Budget	Actual	Budget	Actual	Plan
1. Lighting & Appliances	Residential	\$ 5,100,501	\$ 4,723,152	\$ 4,708,434	\$ 4,521,562	31,321,000
2. Home Energy Solutions	Residential	\$ 15,097,877	\$ 14,042,588	\$ 11,798,620	\$ 11,736,577	25,612,000
3. Efficient Cooling Solutions	Residential	\$ 2,620,953	\$ 2,344,395	\$ 2,608,580	\$ 2,209,519	16,141,000
4. Energy Solutions for Multi-Family	Residential	\$ 701,785	\$ 688,946	\$ 1,087,309	\$ 964,280	2,905,000
5. Energy Solutions for Manufactured Homes	Residential	\$ 634,547	\$ 810,080	\$ 1,066,973	\$ 1,013,729	1,671,000
6. Residential Benchmarking Program	Residential	\$ 686,161	\$ 598,198	\$ 557,798	\$ 468,626	6,328,000
7. Residential Direct Load Control	Residential	\$ 4,332,150	\$ 4,052,965	\$ 3,044,555	\$ 2,064,063	0
8. Energy Efficiency Arkansas	Residential	\$ 326,589	\$ 230,642	\$ 198,507	\$ 197,986	0
9. Commercial Midstream	Commercial & Industrial	\$ 1,153,018	\$ 1,033,206	\$ 1,228,253	\$ 1,116,444	13,101,000
10. C&I Solutions Program	Commercial & Industrial	\$ 23,308,895	\$ 19,748,340	\$ 23,644,196	\$ 21,195,549	110,073,000
11. Small Business	Small Business	\$ 3,247,526	\$ 3,293,002	\$ 4,184,886	\$ 4,269,781	11,088,000
12. City Smart	Commercial & Industrial	\$ 4,265,759	\$ 4,215,474	\$ 3,664,805	\$ 3,638,872	12,787,000
13. Agricultural Energy Solutions	Agriculture	\$ 965,016	\$ 887,504	\$ 1,018,569	\$ 765,606	6,542,000
14. Agricultural Irrigation Load Control	Agriculture	\$ 3,522,940	\$ 3,586,750	\$ 3,092,606	\$ 2,837,698	0
15. Bring Own T-stat Pilot	Residential	\$ -	\$ -	\$ 130,676	\$ 68,912	0
16. Empty		\$ -	\$ -	\$ -	\$ -	0
17. Empty		\$ -	\$ -	\$ -	\$ -	0
18. Empty		\$ -	\$ -	\$ -	\$ -	0
19. Empty		\$ -	\$ -	\$ -	\$ -	0
20. Empty		\$ -	\$ -	\$ -	\$ -	0
Regulatory		\$ -	\$ 14,865	\$ -	\$ 72,440	
Total Portfolio - Current Programs		\$ 65,963,717	\$ 60,270,107	\$ 62,034,767	\$ 57,141,646	237,569,000

Program Year	Company Statistics		
	Revenue and Sales		Expense
	Revenue	Sales (kWh)	Budget
2017	\$ 1,739,545,000	20,888,455	#####
2016	\$ 1,733,733,000	20,639,386	#####
2015	\$ 1,820,805,000	21,160,228	#####
2014	\$ 1,642,896,000	21,001,325	#####

Annual Net Energy Savings (kWh)

2016	2017	
Evaluated	Plan	Evaluated
53,871,110	29,927,961	50,040,143
24,842,378	22,638,739	25,757,464
10,724,845	17,446,000	9,548,026
2,794,597	3,011,306	6,111,955
1,620,786	1,996,069	4,690,095
8,142,462	9,118,435	7,901,231
52,172	0	1,734
0	0	0
10,411,844	11,466,158	12,312,436
91,431,787	109,920,001	98,073,142
17,197,779	13,247,024	23,005,941
25,040,969	12,806,791	19,940,702
7,159,184	6,551,697	7,609,051
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

Annual Net Demand Savings (kW)

2016		2017	
Plan	Evaluated	Plan	Evaluated
3,600	8,160	6,533	9,908
9,000	8,535	10,440	10,122
8,600	3,348	10,228	2,908
700	865	1,716	2,526
600	192	393	1,083
4,500	5,863	6,718	5,351
27,300	28,099	35,000	37,612
0	0	0	0
2,500	1,886	1,654	3,452
15,100	11,123	17,364	12,174
1,700	2,024	2,841	2,817
2,100	4,410	2,598	3,203
900	965	937	1,040
14,900	17,027	31,000	12,216
0	0	580	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

253,289,913 238,130,182 264,991,920

91,500

92,496

128,003

104,412

EE Portfolio		
Actual	Savings (kWh)	
Actual	Budget	Actual
#####	238,130,182	264,991,920
#####	194,165	253,201
#####	186,555	229,268
#####	197,564	205,507

